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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,131	11/25/2003	Henry S. Kolesinski	HK001AFP	6353

7590 05/06/2005

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Charlestown, MA 02129

EXAMINER

THERKORN, ERNEST G

ART UNIT	PAPER NUMBER
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1723

DATE MAILED: 05/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/721,131

Applicant(s)

KOLESINSKI ET AL.

Examiner

Ernest G. Therkorn

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 April 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5, 8-14, 16 and 19-22 is/are pending in the application.
- 4a) Of the above claim(s) 1-3, 8-10 and 21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-14, 16, 19, 20 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Claim 16 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 16 is dependent on a cancelled claim.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11, 13, 14, 16, 20, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Novak (U.S. Patent No. 4,155,846) in view of Grandics (U.S. Patent No. 5,466,377) and Afeyan (U.S. Patent No. 5,605,623). At best, the claims differ from Novak (U.S. Patent No. 4,155,846) in reciting either flow channels of greater than 50 microns or flow channels of greater than 100 microns. Grandics (U.S. Patent No. 5,466,377) (column 2, lines 38-47 and 56-65) discloses large beads in the 500 to 1000 micron range allow direct processing of unclarified feed stream from a fermentation harvest. Afeyan (U.S. Patent No. 5,605,623) (column 19, lines 40-41) discloses that the diameter of the intraparticle flow channels is 1/3 of the size of the particle size. It would have been obvious to use Grandics (U.S. Patent No. 5,466,377)'s particles in Novak (U.S. Patent No. 4,155,846) because Grandics (U.S. Patent No. 5,466,377) (column 2, lines 38-47 and 56-65) discloses large beads in the 500 to 1000 micron range allow direct processing of unclarified feed stream from a fermentation harvest. It would have been obvious that Grandics (U.S. Patent No. 5,466,377)'s flow channels are 50 microns or greater because Afeyan (U.S. Patent No. 5,605,623) (column 19, lines 40-41)

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discloses that the diameter of the intraparticle flow channels is $1/3$ of the size of the particle size.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Novak (U.S. Patent No. 4,155,846) in view of Grandics (U.S. Patent No. 5,466,377) and Afeyan (U.S. Patent No. 5,605,623) as applied to claims 11, 13, 14, 16, 20, and 22 above, and further in view of each of Staby (U.S. Patent No. 6,451,987), Ageland (U.S. Patent No. 6,107,467), and Johnson (U.S. Patent No. 4,885,207). At best, the claim differs from Novak (U.S. Patent No. 4,155,846) in view of Grandics (U.S. Patent No. 5,466,377) in reciting recovering the products of recombinant DNA processes. Staby (U.S. Patent No. 6,451,987) (column 18, lines 22-26) discloses that it is desirable to recover a product of recombinant DNA technology by chromatography. Ageland (U.S. Patent No. 6,107,467) (column 13, lines 48-58) discloses that it is desirable to remove the recombinant DNA products of untreated fermentation broths. Johnson (U.S. Patent No. 4,885,207) (column 1, lines 20-26) discloses that chromatography is especially useful for the isolation of extracellular material expressed by a microorganism as a result of recombinant DNA incorporated into it. It would have been obvious to recover the products of recombinant DNA processes in Novak (U.S. Patent No. 4,155,846) in view of Grandics (U.S. Patent No. 5,466,377) and Afeyan (U.S. Patent No. 5,605,623) either because Staby (U.S. Patent No. 6,451,987) (column 18, lines 22-26) discloses that it is desirable to recover a product of recombinant DNA technology by chromatography or because Ageland (U.S. Patent No. 6,107,467) (column 13, lines 48-58) discloses that it is desirable to remove the recombinant DNA products of untreated

fermentation broths or because Johnson (U.S. Patent No. 4,885,207) (column 1, lines 20-26) discloses that chromatography is especially useful for the isolation of extracellular material expressed by a microorganism as a result of recombinant DNA incorporated into it.

Claims 14 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Novak (U.S. Patent No. 4,155,846) in view of Grandics (U.S. Patent No. 5,466,377) and Afeyan (U.S. Patent No. 5,605,623) as applied to claims 11, 13, 14, 16, 20, and 22 above, and further in view of Grunfeld (U.S. Patent No. 5,004,547). At best, the claims differ from Novak (U.S. Patent No. 4,155,846) in view of Grandics (U.S. Patent No. 5,466,377) and Afeyan (U.S. Patent No. 5,605,623) in reciting capturing different components and use of a detection system. Novak (U.S. Patent No. 4,155,846) (column 8, lines 1-3) itself discloses use of differing absorbents. Grunfeld (U.S. Patent No. 5,004,547) (Abstract, lines 1-6, column 2, lines 20-30, column 4, line 66-column 4, line 4, column 5, lines 34-40) discloses each column segment recovers a different component so as to enhance the separability thereof. Grunfeld (U.S. Patent No. 5,004,547) (column 6, lines 20-42) discloses that use of a detection system permits adjustments to optimize recovery of the desired substances. It would have been obvious to capture different substances in Novak (U.S. Patent No. 4,155,846) in view of Grandics (U.S. Patent No. 5,466,377) and Afeyan (U.S. Patent No. 5,605,623) because Novak (U.S. Patent No. 4,155,846) (column 8, lines 1-3) itself discloses use of differing absorbents and because Grunfeld (U.S. Patent No. 5,004,547) (Abstract, lines 1-6, column 2, lines 20-30, column 4, line 66-column 4, line 4, column 5, lines 34-40)

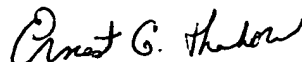
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discloses each column segment recovers a different component so as to enhance the separability thereof. It would have been obvious to use a detection system in Novak (U.S. Patent No. 4,155,846) in view of Grandics (U.S. Patent No. 5,466,377) and Afeyan (U.S. Patent No. 5,605,623) because Grunfeld (U.S. Patent No. 5,004,547) (column 6, lines 20-42) discloses that use of a detection system permits adjustments to optimize recovery of the desired substances.

The remarks urge that the examination of an additional invention would not be an undue burden on the examiner. However, the additional search and different issues of patentability would be an enormous burden on the examiner. As such, the restriction requirement has been reconsidered, deemed proper, and made final for the reasons of record.

Any inquiry concerning this communication should be directed to E. Therkorn at telephone number (571) 272-1149. The official fax number is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)


Ernest G. Therkorn
Primary Examiner
Art Unit 1723

EGT May 4, 2005